

**Research Bulletin**  
**Connecticut Interdistrict Magnet and State Charter Schools:**  
**Evaluation Highlights**

In April 2003, the Connecticut State Board of Education adopted two evaluation reports. Staff from the Division of Evaluation and Research conducted the research for the first report, 'Interdistrict Magnet Schools and Magnet Programs in Connecticut: An Evaluation Report.' A research team from the Evaluation Center at Western Michigan University conducted the charter school research and prepared the second report, 'Evaluation of Connecticut Charter Schools and the Charter School Initiative.' This **Research Bulletin** summarizes the highlights from the two reports.

### **Connecticut's Interdistrict Magnet Schools and Magnet Programs**

#### **Interdistrict Magnet Schools 2002-03 Status:**

- 31 interdistrict magnet schools and programs were operating in 2002-03
- 10,700 students were enrolled
- 100 CT public school districts participated

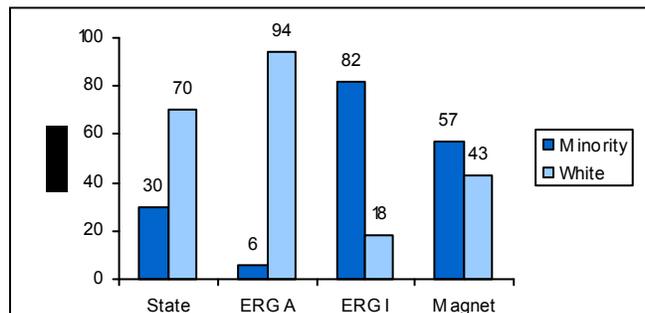
#### **The Mission of Interdistrict Magnet Schools and Magnet Programs:**

- to reduce racial, ethnic, and economic isolation
- to offer high-quality and special programs designed to improve student academic performance

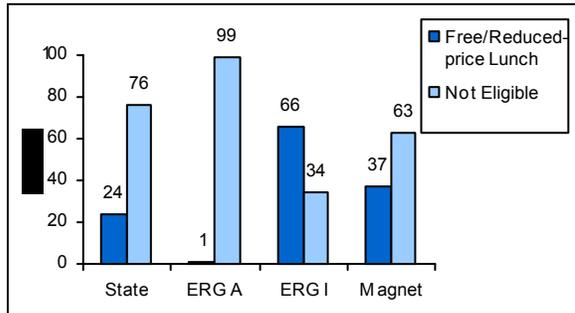
#### Interdistrict Magnet Schools Reduce Racial, Ethnic, and Economic Isolation

Figures 1 and 2 compare the racial, ethnic, and economic composition of Connecticut interdistrict magnet schools, with public schools statewide, in ERG A (the state's most affluent districts) and ERG I, (the state's high-poverty districts). The percentage of students eligible for free/reduced-price lunch is an indicator of the economic need of a school's student population.

**Figure 1: Racial and Ethnic Composition of Students**



**Figure 2: Economic Composition of Students**



The figures show that interdistrict magnet schools and programs, most of which are located in Connecticut's ERG I public school districts, have more racially, ethnically, and economically diverse student populations than most other schools statewide. Since 21 percent of the professional staff are minorities, compared with seven percent statewide, students who attend interdistrict magnet schools have the opportunity to be in a learning environment where teachers bring diverse perspective to their classroom experiences. Large proportions of parents, teachers, and students believe their schools are diverse learning communities, where students from different backgrounds work collaboratively on academic projects and socialize outside of class.

### Interdistrict Magnet School CMT Scores Improve As Students Progress Through Higher Grades

Figures 3 and 4 compare the mathematics and reading performance of elementary and middle magnet school students with that of their counterparts statewide. In 2001-02, as students progressed through higher grades in elementary and middle interdistrict magnet schools, the gap between the proportion of students meeting goal in mathematics and reading statewide and in magnet schools decreased. Additionally, by grade eight 63 percent of interdistrict magnet students met the state goal in writing, above the statewide average of 59 percent. Ninety percent of parents and teachers believe their magnet schools have high expectations for students' academic performance, and 95 percent of students understand their teachers expect them to do their best work. Parents select interdistrict magnet schools because of their challenging academic programs and teacher/administrator quality.

Figure 3: Elementary and Middle Magnet Math CMT

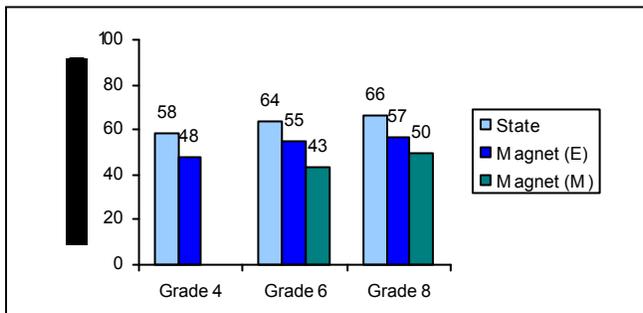
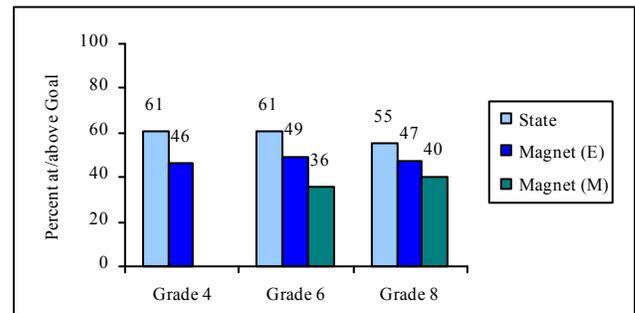


Figure 4: Elementary and Middle Magnet Reading CMT



### Interdistrict Magnet High School Graduates Benefit From Quality Academic Programs

As sophomores, interdistrict magnet high schools students participate in CAPT testing in larger proportions than students statewide. Figure 5 displays the 2002 results, which indicate that magnet school students perform considerably lower on all four CAPT subtests, although these results are higher than previous years' results. In grade ten, interdistrict magnet school students appear to be more academically at-risk than many other grade ten students statewide. However, the summary of four-year high school drop-out rates presented in Table 6 shows that smaller percentages of interdistrict magnet school students, than students statewide, dropped out of high school from 1998 to 2001. Even with an at-risk population, magnet high schools are successful in retaining students through graduation.

Figure 5: 2002 CAPT Percent At/Above Goal

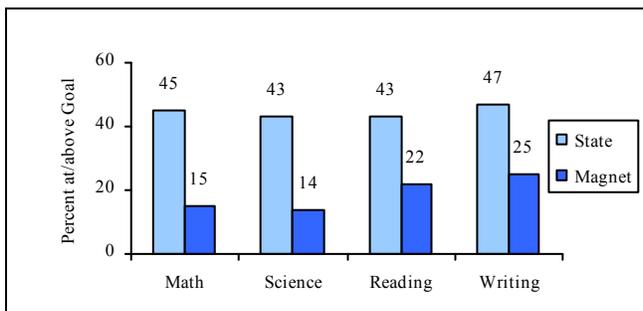


Figure 6: Four-Year High School Drop-out Rates:

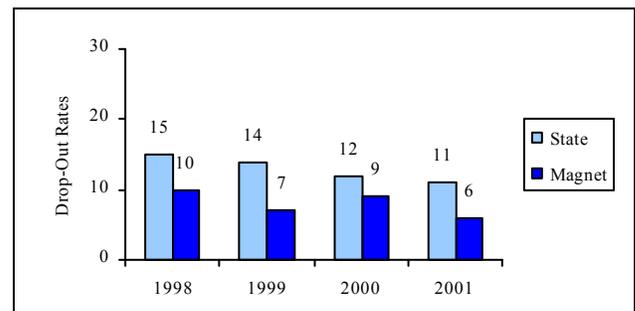


Figure 7 compares the percentages of graduates from interdistrict magnet high schools and high schools statewide who, during their high school careers, have taken algebra, chemistry, and advance placement courses, courses that prepare students for college. The percentage of magnet school graduates taking each of the three types of courses exceeds the statewide average. In addition, Figure 8 shows that the percentage of interdistrict magnet school students entering four-year colleges and universities after graduation surpassed the statewide averages from 1998 to 2001.

Figure 7: 2001 Graduates Taking College Prep Courses

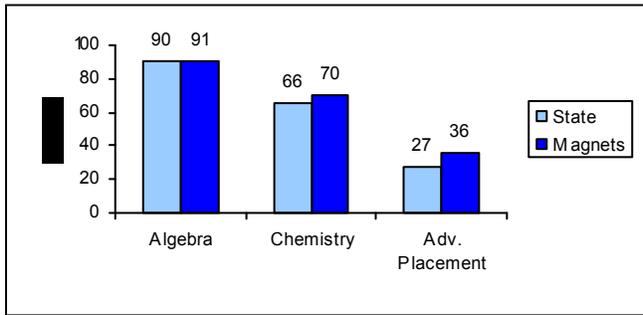
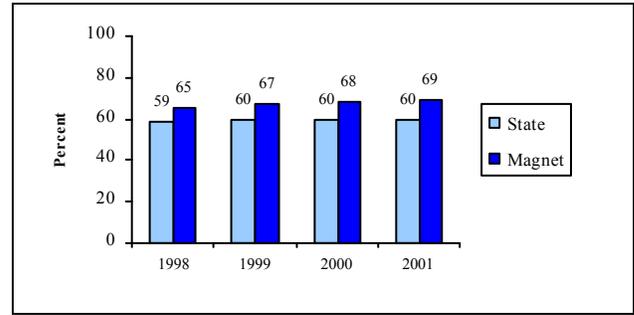


Figure 8: Graduates Entering Four-Year Colleges



**A teacher comment regarding her magnet school:** *“I selected this magnet school– and have wished to remain here– not because its location is convenient or its compensation is competitive, but because I feel that the school has the best opportunity to offer students a well-rounded education.”*

## Connecticut State Charter Schools

### **Connecticut Charter Schools 2002-03 Status:**

- 13 state charter schools were operating in 2002-03, five elementary, five middle, and three high schools
- 2,218 students were enrolled in Connecticut charter schools
- 70 CT public school districts send students to charter schools, 11 communities host charter schools

### **The Mission of Charter Schools:**

- to offer innovative, high-quality programs that foster improvement in student academic performance
- to make efforts in reducing racial, ethnic, and economic isolation

### **Defining Characteristics of State Charter Schools:**

- public, nonsectarian schools
- established under a charter authorized by the Connecticut State Board of Education for up to five years
- autonomous public agency
- operated independently of any local or regional board of education
- enrollment is determined by lottery if the number of applicants exceeds the number of available seats

### Reducing Racial Ethnic, and Economic Isolation

Figures 9 and 10 compare the racial/ethnic, and economic composition of students in Connecticut charter schools with the counterparts in ERG A schools, ERG I schools, and schools statewide. Figure 9 suggests that charter schools attract a larger percentage of white students than schools in ERG I districts, from which they draw a large percentage of their student populations. Table 10 compares the proportions of students eligible for free or reduced price lunch and the proportions of students who have limited English proficiency (LEP), two measures of the economic composition of schools, in charter schools to schools state-wide, and in ERG A and ERG I. Charter schools are somewhat more economically diverse than schools in ERGs A and I, and somewhat less diverse than schools statewide.

Figure 9: The Racial Composition of Students

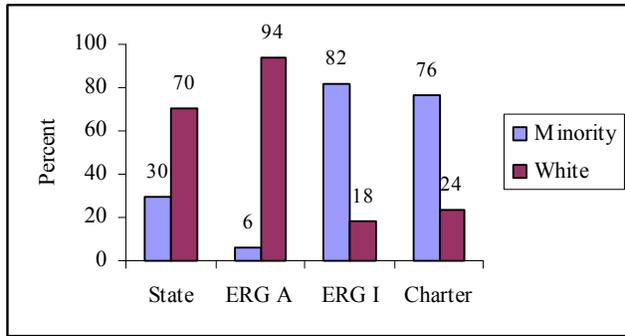
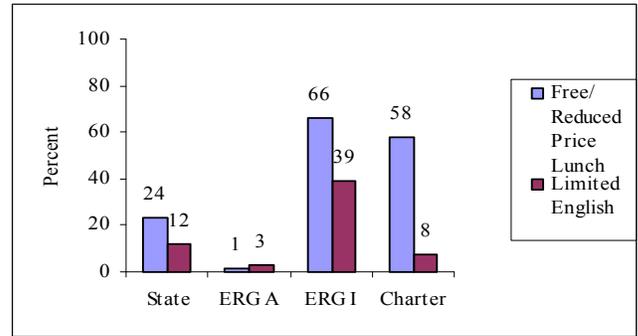


Figure 10: The Economic Composition of Students



**Charter School Student CMT Performance Improves as Students Progress Through the Grades**

Figures 11-13 display 2001-02 CMT reading, mathematics, and writing results for charter schools and comparison groups. Host districts refer to the districts where charter schools are located.

Figure 11: Elementary and Middle CMT Reading Results

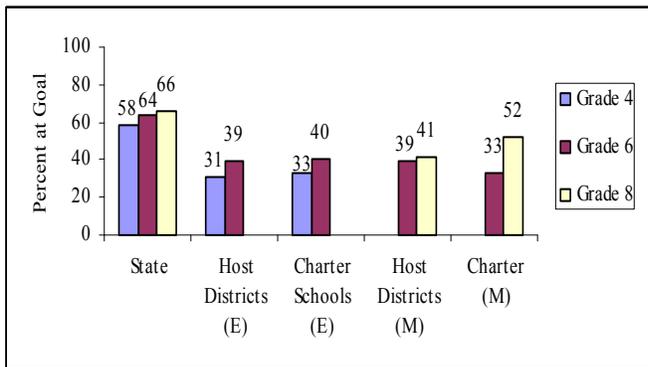
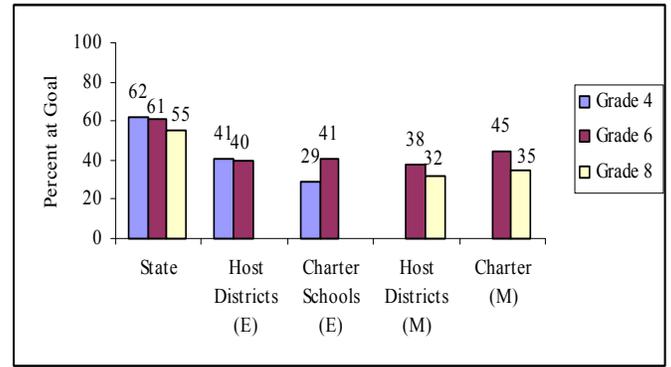


Figure 12: Elementary and Middle CMT Math Results



The performance of students in charter school serving elementary (E) and middle (M) grade students is compared with that of students in their host districts and districts statewide. Figure 11 summarizes the reading performance of students in schools that administer the CMT in grades four and six (E) and schools that administer the CMT in grades six and eight (M). The trend in reading performance is positive for all groups of students. The level of elementary grade four and six charter students' reading performance is similar to that of their host districts. Charter middle grade students' reading performance is lower than the host districts' level in grade six, but eleven percentage points higher in grade eight. For mathematics performance, the trend in the proportion of students meeting goal declines across grades, for all subgroups except charter elementary schools where sixth grade students outperform their fourth grade counterparts by 12 percentage points.

Figure 13: 2001 Elementary and Middle CMT Writing Results

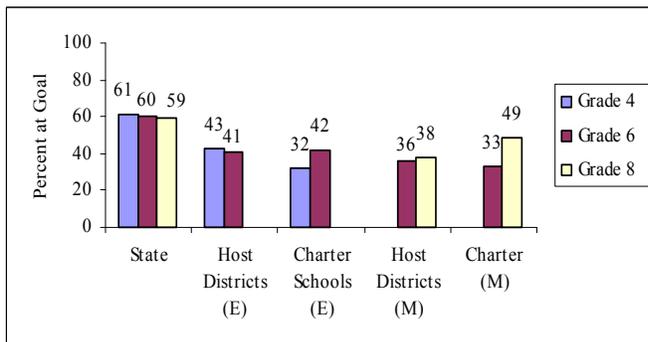


Figure 13 displays CMT writing performance results. The state trend in the proportion of students meeting goal declines slightly across the three grades. For elementary schools, charter students' writing performance is lower in grade four than that of the host district students. In grade six the proportion of charter school students meeting goal in writing is ten percentage points higher than the grade four level and exceeds the host district level. For middle grade six students, the proportion of charter school students meeting goal is lower than the host district rate, while in grade eight the charter proportion exceeds the host district average by 16 percentage points.

## Charter High School Performance

Figure 14 compares the percentages of grade 10 students from the state's three charter high school meeting the state goal on the four CAPT subtests in 2002 to those for the host districts and high schools statewide. For each subtest, charter high school students score below the statewide average and the host district levels. The CAPT data suggest that grade 10 charter school students are considerably more at-risk academically than grade 10 students in the districts where they are located and the state as a whole. Yet data on high school graduates indicates that charter high school graduate drop-out rates are lower than those of the host district and similar to those statewide. Additionally, the percentage of charter high school graduates who attend two and four-year colleges is higher than those for the host districts and for the state.

Figure 14: Grade 10 CAPT Performance

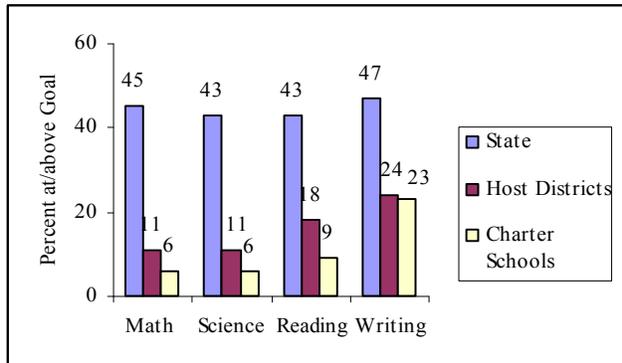
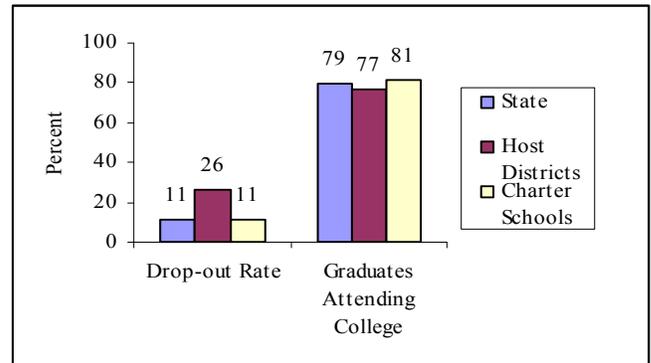


Figure 15: Drop-out Rates and College Attendance



**With regard to student academic performance in charter schools, the Western Michigan University evaluation team noted:** *“Compared with the results in other states, the results we obtained in Connecticut are clearly the most substantial and the most positive that we have found in terms of student achievement gains made by charter schools. Also, given the strength and consistent direction of the trends over time, we conclude that charter schools in Connecticut are having a positive impact on students’ achievement.”*

### Common Characteristics of Connecticut’s Successful Magnet and Charter Schools

- Principal is a strong instructional leader
- School community members understand and support the school mission/theme
- The theme is incorporated across the curriculum and infused in the school culture
- Instructional decisions are based on student performance data
- Parents are actively involved
- Professionals and parents have high expectations for all students
- Accountability for improving student academic performance is shared among community



This **Research Bulletin** was prepared by Dr. Barbara Q. Beaudin, Education Consultant, from the Bureau of Information Management and Analysis in the Connecticut State Department of Education’s Division of Evaluation and Research. The full charter school and magnet school evaluation reports are available on the CSDE website, [www.state.ct.us/sde](http://www.state.ct.us/sde), under the Bureau of Choice and Innovative Programs. If you have additional questions, please call Dr. Beaudin at (860)-713-6837 or email her at [barbara.beaudin@po.state.ct.us](mailto:barbara.beaudin@po.state.ct.us).